AMENDMENTS TO THE SPECIFICATION

On page 2, please amend the paragraph beginning on line 22 as follows:

Referring to FIG. 1, an MSC (Mobile Switching Center) being a core network (CN) in the circuit-switched domain is separated into an MSC server and a media gateway (MGW). The MSC server is connected to a UTRAN (UMTS Terrestrial Access Network) through a predetermined signaling interface and processes signaling in the circuit-switched domain. That is, the MSC server processes signaling necessary to interface circuit data with the UTRAN or a GMSC (Gateway MSC). The UTRAN includes plurality of Node B which corresponds to a ~~(~~BTS~~;~~ (Base station transmission System) connected to respective RNC(Radio Network Controller) and MSC. The MGW is connected to the UTRAN through a predetermined data transfer interface and switches circuit data in the circuit-switched domain. For this purpose, a protocol must be defined between the MSC server and the MGW to exchange information. MeGaCo (Media Gateway Control) protocol of IETF, which is also defined in H.248 of ITU-T, is adopted for example. Meanwhile, the GMSC connected to the PSTN (Public Switched Telephone Network) is separated into a GMSC server and an MGW. The MGW of the GMSC is connected to the MGW of the MSC through a predetermined data transfer interface and switches circuit data between the PSTN and the CN. The GMSC server is connected to the MSC server through a predetermined signaling interface and processes signaling required for switching circuit data between the PSTN and the CN. For this purpose, a protocol must be defined between the GMSC server and the MGW of the GMSC to exchange information.

On page 4, please amend the paragraph beginning on line 24 as follows:

The foregoing and other object of the present invention are achieved by providing a core network separation structure and a signal processing method between separated elements. According to one aspect of the present invention, an MS (mobile station) transmits a first message requesting PDP (Packet Data Protocol) context activation to an SGSN server. The SGSN server transmits a second message representative of a switching path for an S-MGW

(SGSN-~~MGM~~MGW) to the S-MGW in order to establish a forward transmission path for transmitting the packet data between the S-MGW and a G-MGW (GGSN-~~MGM~~MGW). The S-MGW transmits a response message for the second message to the SGSN server. The SGSN server transmits a third message requesting PDP context creation to a GGSN server in response to the response message of the second message. The GGSN server transmits a fourth message representative of a switching path for the G-MGW to the G-MGW in order to establish a reverse transmission path for transmitting the packet data between the G-MGW and the S-MGW. The G-MGW transmits a response message for the fourth message to the GGSN server. The GGSN server transmits a response message for the third message to the SGSN server in response to the response message of the fourth message. The SGSN server establishes the reverse transmission path for the S-MGW by the response message of the third message. Then, the SGSN server transmits a message indicating completed establishment of the forward and reverse transmission paths to the MS. Thus, packet data transmission paths are established in a packet switching network.

On page 13, please amend the paragraph beginning on line 15 as follows:

FIG. 3 is a diagram showing an information flow for an initial call setup, that is, to establish initial paths in the packet-switched domain according to the embodiment of the present invention. The steps shown in FIG. 3 except steps 2, 3, and 7 through ~~10~~ 11 are described in "3GPP TS 23.060 v3.4.0".

On page 19, please amend the paragraph beginning on line 13 as follows:

When the MS location information is completely updated in the above procedure, the MS requests release of existing channels to the old SGSN server in steps 20 through 24. The old SGSN server transmits a SUBTRACT Request message requesting release of an existing call to the old S-MGW in step 25. In step 26, the old S-MGW transmits a SUBTRACT Response message for the SUBTRACT Request message to the old SGSN server, thereby terminating the SRNS relocation. A Routing Area update is then performed in step 27.

On page 20, please amend the paragraph beginning on line 10 as follows:

If the MS requests a location registration in step 1, ~~When~~ the MS transmits a Routing Area update Request message to a new 2G SGSN in step 2, and then steps ~~2~~3 through 8 are performed. Upon receipt of an SGSN Context Acknowledge message acknowledging the routing area update request from the new 2G SGSN, an old 3G SGSN server transmits an ADD Request message requesting relocation of the MS to an old 3G S-MGW in step 9. The old 3G S-MGW relocates the MS and transmits an ADD Response message for the ADD Request message to the old 3G SGSN server in step 10. Then, conventional steps 11 through 14 are performed. The GGSN server receives an Update PDP Context Request message requesting the update of a modified PDP in step 14. In step 15, the GGSN server transmits a MODIFY Request message to the G-MGW, requesting update of the MS location information. The G-MGW updates the MS location information. After the updating, the G-MGW transmits a MODIFY Response message for the MODIFY Request message to the GGSN server in step 16. Then, conventional subsequent steps 17 through 21 are performed. In step 22, the old 3G SGSN server transmits a SUBTRACT Request message to the old 3G S-MGW, requesting release of an existing call. In step 23, the old 3G S-MGW transmits a SUBTRACT Response Message to the old 3G SGSN server in step 23, thereby completing the location registration. The subsequent steps 24 through 29 have already been defined as mentioned before. Therefore, their description is omitted here. Then, conventional steps 30 through 38 are

performed. BSS packet flow context procedure is additionally performed between the BSS and the new 2G-SGSN.

On page 21, please amend the paragraph beginning on line 20 as follows:

If the MS requests a location registration in step 1, ~~After~~ the MS transmits a Routing Area update Request message to a new 3G SGSN server in step 2, and then steps 3, 4 and 5 are performed. The new 3G SGSN server transmits an ADD Request message requesting relocation of the MS to a new 3G S-MGW in step 6. The new 3G S-MGW relocates the MS and transmits an ADD Response message for the ADD Request message to an old 2G SGSN in step 7. Then, steps 8 through 10 are performed in the conventional manner. The GGSN server receives an Update PDP Context Request message requesting update of a modified PDP in step 10. In step 11, the GGSN server transmits a MODIFY Request message to the G-MGW. The G-MGW transmits a MODIFY Response message for the MODIFY Request message to the GGSN server in step 12. Then, conventional subsequent steps 13 through 33 are performed. In step 34, the new 3G SGSN server transmits a MODIFY Request message requesting update of the MS location information to the new 3G S-MGW. The new 3G S-MGW updates the MS location information. In step 35, the new 3G S-MGW transmits a MODIFY Response message for the MODIFY Request message to the new 3G SGSN server.